

Date: Wednesday, 3/14/2007 12:22:31 PM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: DOUBLER ASSEMBLY
Job Number	: 31177		
Estimate Number	: 12368		
P.O. Number	: N/A	Part Number	: D314010
This Issue	: 3/14/2007 S.O. No. : N/A	Drawing Number	: D3140 REV F
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A	Drawing Revision	: F
Previous Run	: 27341	Material	: N/A
	Type : SMALL /MED FAB	Due Date	: 3/21/2007
Written By	:	Qty:	1 Um: Each
Checked & Approved By	:		
Comment	: Est. A 06.04.19 New Issue KJ		
	Est Rev:B As per ECN #829 06-11-20 JLM		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D314085	Angle
-----	---------	-------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Angle

Batch

B 31215

FF 07-03-19

2.0	D314089	Doubler
-----	---------	---------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Doubler

Batch

B 17314

FF 07-03-19

3.0	MS20426AD34	RIVET
-----	-------------	-------



Comment: Qty.: 5.0000 Each(s)/Unit Total : 5.0000 Each(s)

RIVET

Batch

M 102404

FF 07-03-19

4.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble as per Dwg D3140

FF 07-03-19

5.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

07/03/19 (1)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/03/20  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07-03-19	4.0	1 hole was oversized to .125 → .130 when a rivet was removed. Human error.	QS1042	Replace with MS20426AD4-3 x 1.  The Fit is good: Material grip	FF 07-03-19	07/03/19	QS1042	0703-19

NOTE: Date & initial all entries

Date: Wednesday, 3/14/2007 12:22:32 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DOUBLER ASSEMBLY

Job Number: 31177

Part Number: D314010

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:           

C207103/19 ①

7.0

QC21

FINAL INSPECTION/W/O RELEASE



①

Comment: FINAL INSPECTION/W/O RELEASE

207103/20

Job Completion



U 07-03-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



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DATE 06.10.06		TITLE DOOR SCALE NTS	
A	02.04.18	NEW ISSUE	
B	03.01.23	REMOVE -65/-81/-83; ADD -301/-303	
C	04.11.08	CHANGE DELASTEK SPEC. TEC-77; ADD PART MARKING; ADD NOTES 11, 12, 13; CHANGE ANGLE -95/-97/-98 TO 106°	
D	05.11.23	ADD -103/-104/-105/-106; REMOVE -67	
E	06.06.09	1.75 WAS 1.88, 4.75 WAS 4.13 ON -08/-07, 1.00 WAS 1.20 ON -09/-10	
F	06.10.06	ADD NOTE 14; CORRECT PART TITLE, NOW D3140-09/-92/-104 SHOWN D3140-10/-91/-103 OPPOSITE	

RELEASED

06.11.13

QTY -05	QTY -06	QTY -07	QTY -08	QTY -09	QTY -10	PART NUMBER	DESCRIPTION
X						D3140-05	DOOR
	X					D3140-06	DOOR
		X				D3140-07	DOOR
			X			D3140-08	DOOR
		1		X		D3140-09	DOUBLER ASSEMBLY
			1		X	D3140-10	DOUBLER ASSEMBLY
3	3					D3140-57	PAD
1	1					D3140-59	PAD
2	2					D3140-61	PAD
2	2					D3140-63	PAD
		1	1			D3140-69	PAD
		1	1			D3140-71	PAD
		1	1			D3140-73	PAD
		1	1			D3140-75	PAD
		1	1			D3140-77	PAD
		1	1			D3140-79	PAD
				1	1	D3140-85	ANGLE
1	1					D3140-87	DOUBLER
				1	1	D3140-89	DOUBLER
		1				D3140-91	DOUBLER
			1			D3140-92	DOUBLER
3	3					D3140-95	DOUBLER
1						D3140-97	DOUBLER
	1					D3140-98	DOUBLER
		1	1			D3140-99	DOUBLER
		2	2			D3140-101	DOUBLER
		1				D3140-103	DOUBLER
			1			D3140-104	DOUBLER
		1				D3140-105	DOUBLER
			1			D3140-106	DOUBLER
1	1					D3140-241	DOUBLER
1		1				D3140-301	DOUBLER
	1		1			D3140-303	DOUBLER
				5	5	MS20426AD3-4	RIVET

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DATE 06.10.06		TITLE DOOR	SCALE NTS

1

COMPOSITE LAYUP & BONDING I.A.W. DELASTEK PROCESS SPEC. TEC-77  
MATERIAL STORAGE & HANDLING TO BE I.A.W. DART QSI 006  
MAIN LAYUP USES FIBERCOTE E-761/7781 EPOXY FIBERGLASS.  
FILL WITH EPOCAST 87269 OR MAGNOBOND 77 A & B AND MA560 FOAM/ NB-51/30 FOAM

2

FINISH: DUPONT HIGHBUILD GREY PRIMER 1144-S

3

MAKE PARTS IN ACCORDANCE WITH THE FOLLOWING TOOLS/MOLDS:

PART	TOOL
D3140-05	B30-23000-01T
D3140-06	B30-23000-02T
D3140-07	B30-23000-03T
D3140-08	B30-23000-04T
D3140-57	B30-23000-57T
D3140-61	B30-23000-61T
D3140-63	B30-23000-63T
D3140-69	B30-23000-69T
D3140-71	B30-23000-71T
D3140-73	B30-23000-73T
D3140-75	B30-23000-75T
D3140-77	B30-23000-77T
D3140-79	B30-23000-79T
D3140-89	D3140-89T1
D3140-301	D3140-301T1
D3140-303	D3140-303T1

RELEASED  
06.11.13 #

4

MATERIAL: 2024-T3 (QQ-A-250/4) 0.032 THICK (M2024T3S.032)  
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

5

MATERIAL: 2024-T3 (QQ-A-250/4) 0.020 THICK (M2024T3S.020)  
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

6

MATERIAL: 5052-H32/H34 (QQ-A-250/8) 0.040 THICK (M5052H32S.040)  
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

7

MATERIAL: POLIMEX TR75 1" THICK 4.5 LB KLEGECELL

8

ALL DIMENSIONS IN INCHES

9

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

10

MATERIAL: 6061-T6 (QQ-A-250/11) 0.063 THICK (M6061-T6S.063)  
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

11

DOUBLER TO SIT ON TOP OF FOAM AT THIS LOCATION

12

DOUBLER TO BE RECESSED FLUSH INTO FOAM AT THIS LOCATION

13

RUBBER STAMP WITH DART P/N D3140-05/-06/-07/-08 USING MIL-STD-130

14

PARTS MUST BE SCUFFED WITH 80 GRIT SANDPAPER PRIOR TO ACID ETCH AND  
ALODINE PER DART QSI 005 4.1

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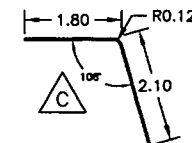
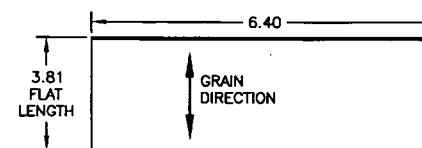
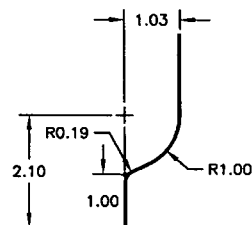
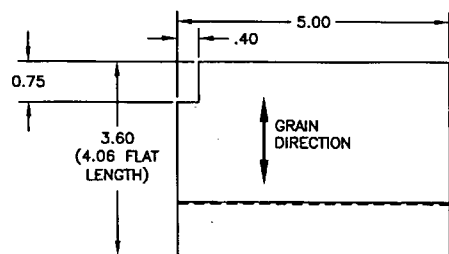
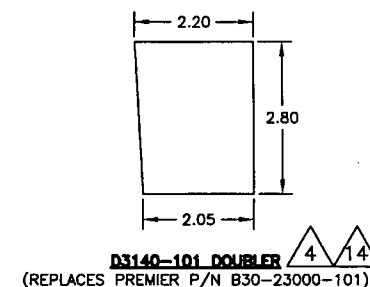
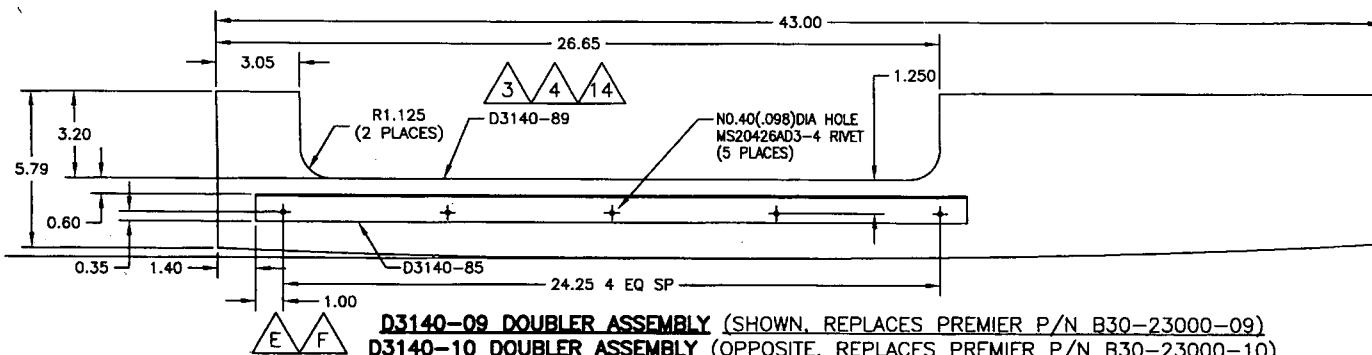
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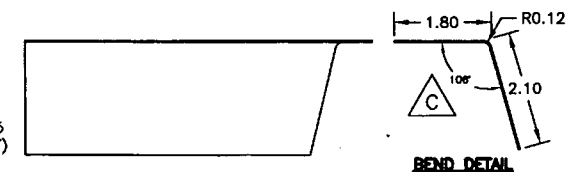
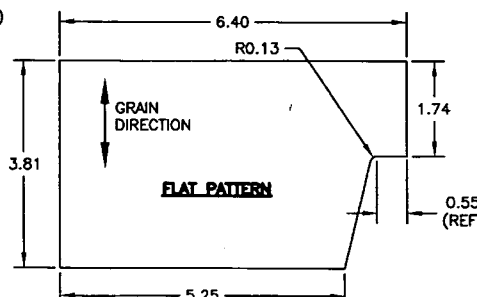
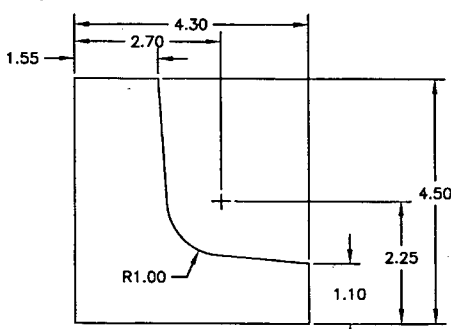






**D3140-91F FLAT PATTERN**  
 (USE TO MAKE D3140-91/-92 DOUBLERS)

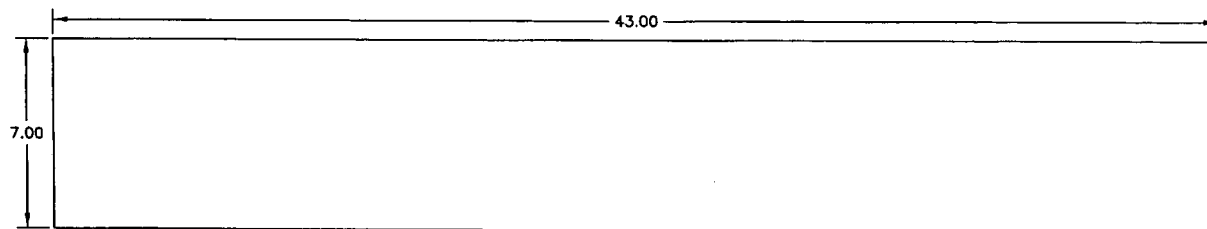
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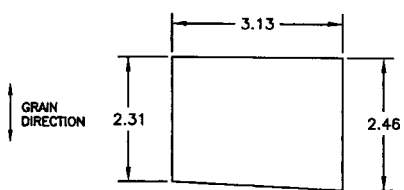
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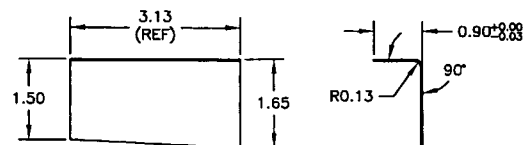
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		DATE	06.10.06			D3140	SHEET 5 OF 7
						TITLE	SCALE
						DOOR	NTS



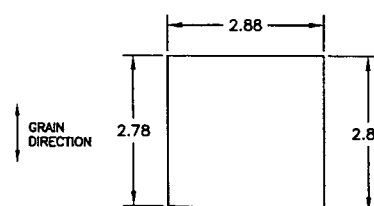
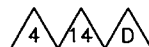
**D3140-87 DOUBLER**   
(REPLACES PREMIER P/N B30-23000-87)



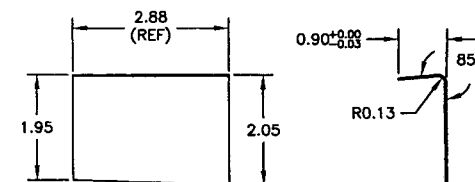
**D3140-105F FLAT PATTERN**  
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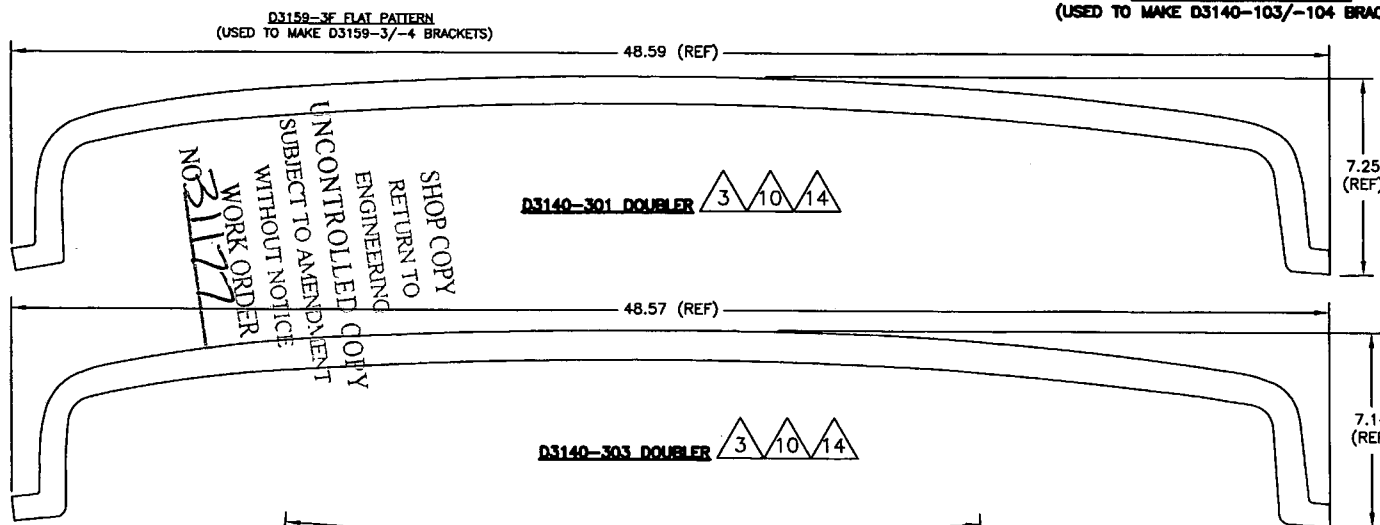
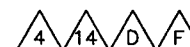
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**D3140-106 OPPOSITE**



**D3140-103F FLAT PATTERN**  
(USED TO MAKE D3140-103/-104 BRACKETS)



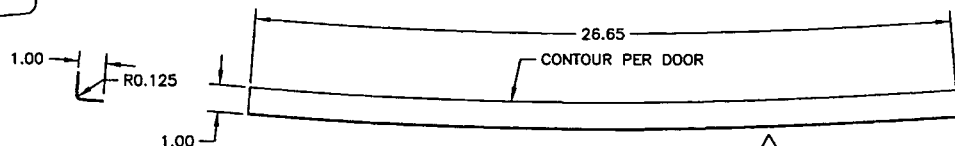
**D3140-104 DOUBLER**  
**D3140-103 OPPOSITE**



**D3140-301 DOUBLER**

**D3140-303 DOUBLER**

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**D3140-85 ANGLE**   
FLAT PATTERN: 26.65" x 1.90"  
(REPLACES PREMIER P/N B30-23000-85)

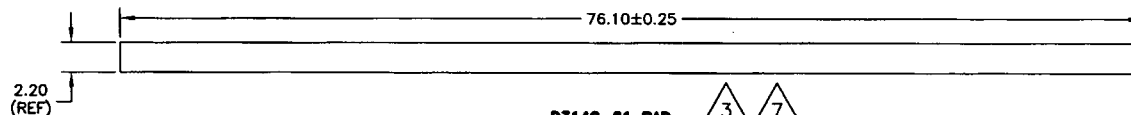
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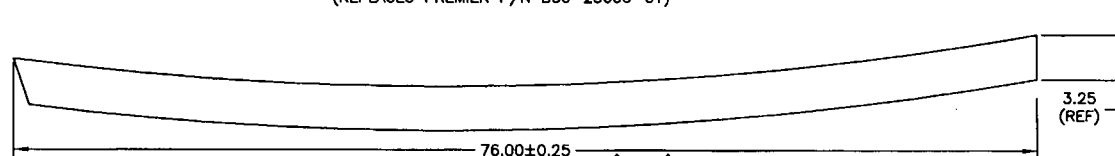
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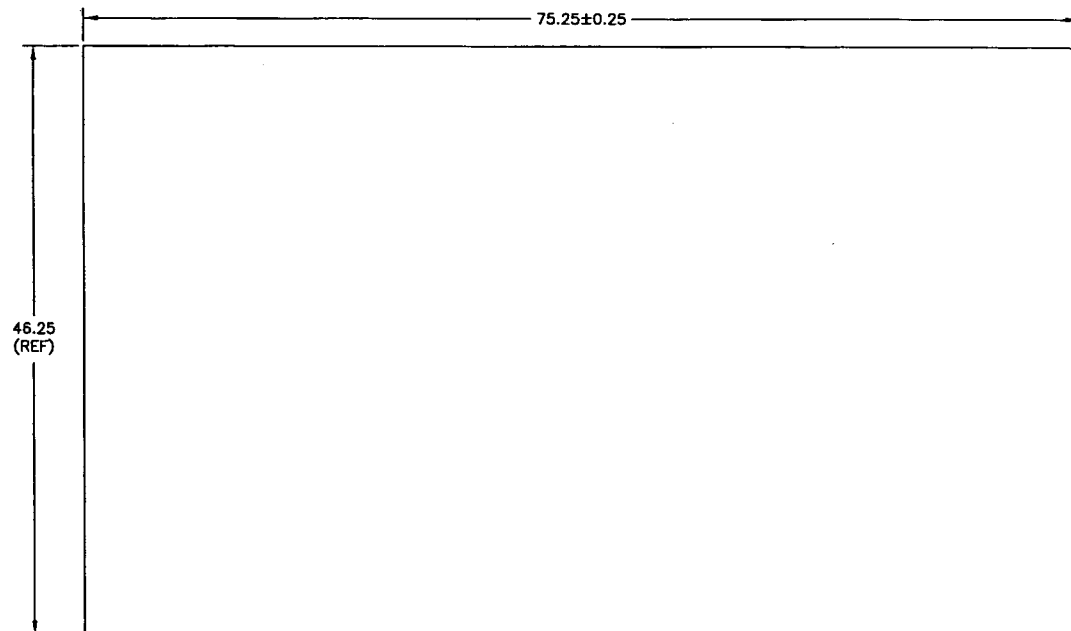
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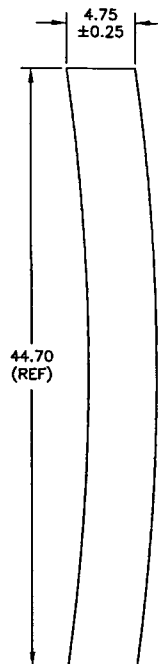
**D3140-61 PAD** 3 7  
(REPLACES PREMIER P/N B30-23000-61)



**D3140-63 PAD** 3 7  
(REPLACES PREMIER P/N B30-23000-63)



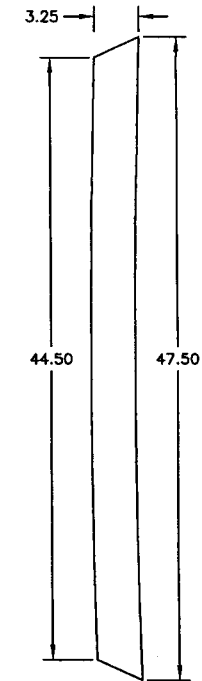
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**D3140-57 PAD**  
(REPLACES PREMIER P/N B30-23000-57)

3 7

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**D3140-241 DOUBLER** 5 14  
(REPLACES PREMIER P/N B30-23000-241)

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R1.00  
(2 PLACES, REF)

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DATE 06.10.06	TITLE DOOR	SCALE NTS	